

ABSTRACT

An angular velocity sensor includes a tuning fork vibrator, a drive unit provided on the tuning folk vibrator, and a detection unit for detecting an amount of deflection of the tuning folk vibrator. The tuning fork vibrator includes a first vibrating arm having a first end and a second end and having a fundamental vibration frequency, a second vibrating arm having a first end and a second end and having the fundamental vibration frequency, and a coupling portion for coupling the first end of the first vibrating arm to the first end of the second vibrating arm. The drive unit is provided on the first vibrating arm and causes the first vibrating arm to vibrate. The drive unit has a driving resistance. The detection unit is provided on one of the first vibrating arm and the second vibrating arm, and detects an amount of deflection of the one of the first vibrating arm and the second vibrating arm when deflecting due to an angular velocity applied to the tuning fork vibrator. A ratio $R1/R2$ is smaller than "1", where $R1$ is the driving resistance at the fundamental vibration frequency, and $R2$ is the driving resistance at a vibration frequency different from the fundamental vibration frequency. This angular velocity sensor does not output unnecessary signals even if receiving disturbance.